## **Comparisons of Job Characteristics**

Focus Occupation: Physical Scientists, All Other (19-2099)
Associated Occupation: Forensic Science Technicians (19-4092)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

### Knowledge

Similarity of Focus Occupation to Associated Occupation: 28

Focus Occupation: Physical Scientists, All Other (19-2099)
Associated Occupation: Forensic Science Technicians (19-4092)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Chemistry	4.8	13.1	4.9	<<	Extensive education and/or training may be required	
Clerical	7.3	12.9	3.8	<<	Extensive education and/or training may be required	
Law and Government	5.9	12.9	5.6	<<	Extensive education and/or training may be required	
Public Safety and Security	6.9	12.0	4.9	<<	Extensive education and/or training may be required	
Biology	3.7	9.3	9.4	0	Current knowledge level may be sufficient	
Medicine and Dentistry	3.7	6.0	1.3	<<	Extensive education and/or training may be required	
Geography	3.9	5.7	21.7	>>	Current knowledge level is likely more than sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Skills**

Similarity of Focus Occupation to Associated Occupation: 83

Focus Occupation: Physical Scientists, All Other (19-2099) Associated Occupation: Forensic Science Technicians (19-4092)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Critical Thinking	10.8	14.1	13.2	Current skill level may be sufficient
Speaking	10.8	13.6	11.8	A higher skill level may be required
Writing	9.2	13.5	13.9	Current skill level may be sufficient
Complex Problem Solving	9.1	12.6	13.3	Current skill level may be sufficient
Active Learning	8.7	11.2	10.6	Current skill level may be sufficient

Instructing	7.8	10.6	9.3	<	A higher skill level may be required
Science	4.5	9.8	13.2	>>	Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Abilities**

#### Similarity of Focus Occupation to Associated Occupation: 88

Focus Occupation: Physical Scientists, All Other (19-2099) Associated Occupation: Forensic Science Technicians (19-4092)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Flexibility of Closure	7.8	16.0	10.6	<<	Extensive improvement in abilities may be required
Deductive Reasoning	10.6	15.1	14.4	0	Current ability level may be sufficient
Near Vision	11.1	15.1	12.2	<	Some improvement in abilities may be required
Problem Sensitivity	11.1	14.4	13.5	0	Current ability level may be sufficient
Inductive Reasoning	10.2	14.3	13.8	0	Current ability level may be sufficient
Information Ordering	9.9	12.9	12.5	0	Current ability level may be sufficient
Far Vision	7.8	12.5	8.8	<<	Extensive improvement in abilities may be required
Category Flexibility	9.0	12.0	11.1	0	Current ability level may be sufficient
Speed of Closure	5.9	11.2	5.0	<<	Extensive improvement in abilities may be required
Perceptual Speed	7.4	11.1	9.1	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

There are no common work activities.

# **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 29

Focus Occupation: Physical Scientists, All Other (19-2099)
Associated Occupation: Forensic Science Technicians (19-4092)

Tools and Technologies	Exclusivity
Cameras	2
Computers	1
Content authoring and editing software	1
Industry specific software	1
Information exchange software	1
Light and wave generating and measuring equipment	4
Network applications software	1
Spectroscopic equipment	10

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.